

	Y	N
19) Are cleaned boiling flasks containing 3-5 boiling chips baked at 105-115°C for a minimum of 2 hrs. prior to being placed in desiccator for cooling and determining the tare weight? [11.3.1]		
<u>Separatory Funnel Extraction</u>		
20) Are 30 mLs of n-hexane added to sample bottle, which is then sealed with original cap; shaken to rinse all interior surfaces; and then poured into the separatory funnel (2 L funnel fitted with a Teflon stopcock)? [11.3.3 - 6.4.3]		
21) Is sample extracted by vigorously shaking the separatory funnel for 2 mins.? [11.3.4]		
22) Are layers allowed to separate for a minimum of 10 mins. before draining the lower layer into the original sample container? [11.3.5 & 11.3.6]		
23) Is the tared weight of the distilling flask recorded? [Permit]		
24) Is solvent layer drained through a Whatman 40 (or equivalent) filter holding approximately 10 g of pre-rinsed sodium sulfate (NaSO ₄) into a tared boiling flask? [11.3.8]		
25) Are 3 extractions performed on each sample? [11.3.9]		
26) Is a small amount of n-hexane drained from separatory funnel with each extraction? [11.3.6]		
27) Are the separatory funnel tip, filter paper, and funnel rinsed with 2-3 small portions of n-hexane which is then added to the flask? [11.3.10]		
<u>Solid Phase Extraction</u>		
28) Is there a SOP available for SPE? [Permit]		
29) Is sample bottle rinsed several times using n-hexane with rinsate being added to the filter? [11.3.3]		
30) Is filter kept moist from time of conditioning until after sample is filtered? [Permit]		
31) Elution		
a) Is sample eluted with several aliquots of n-hexane? [11.3]		
b) Is a small amount of each n-hexane rinse pulled through filter with remaining solvent held in filter for a minimum of 2 mins. prior to starting next rinse? [Permit]		
c) Are sides of reservoir above filter rinsed with n-hexane? [Permit]		
32) Are eluents passed through approximately 10 g of pre-rinsed sodium sulfate (NaSO ₄) into a tared boiling flask with collection vessel rinsate added to flask also? [11.3.8]		
<u>Evaporation</u>		
33) Is solvent collected during the evaporation process for reuse? [11.4.1]		
34) Is temperature of water bath or steam bath adjusted to allow concentration to be completed in 30 mins.? Approx. 85°C [11.4.1]		
35) Is the sample allowed to distill until the flask appears dry or distillation head reaches 70°C? [11.4.2]		
36) Following evaporation, is the flask swept of solvent fumes with a vacuum for 15 secs.? [11.4.2]		
37) Is the flask wiped clean of moisture and fingerprints, dried in oven at 70 ± 2°C for 30 min., and then placed in a desiccator for 30 mins. minimum prior to weighing? [11.4.2 - 11.4.4]		
38) Was drying cycle repeated until weight loss was < 4% of previous wt. or < 0.5 mg, whichever was less? [11.4.4]		
39) Is weight of the distilling flask and residue recorded? [11.4.4]		

		Y	N
40)	Is weight of the residue calculated and recorded? [11.4.4.1]		
41)	Is the volume of the original sample determined and recorded? [11.4.5]		
42)	Is calculation for the concentration of HEM (oil and grease) correct and shown on the bench sheet? [12.1]		
$HEM(mg/L) = \frac{W_h(mg)}{V_s(L)}$			
where : W_h = Weight of extractable material V_s = Sample volume			

PROBLEMS: